

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HYBRID PATENTS INCORPORATED	§	
	§	
vs.	§	Case No. 2:05-CV-436
	§	
CHARTER COMMUNICATIONS	§	
INCORPORATED, ET AL.	§	

MEMORANDUM OPINION AND ORDER

1. Introduction

In this case, Hybrid Patents Inc. (“Hybrid”) asserts various claims of four United States patents against Charter Communications Inc. (“Charter”). The asserted patents include U.S. Reissue Patent No. 35,774 (“the ‘774 patent”) and three related¹ U.S. Patents, Nos. 5,586,121 (“the ‘121 patent”), 5,818,845 (“the ‘845 patent”), and 6,104,727 (“the ‘727 patent”) (referred to collectively as “the ‘121 patent family”). This opinion and order resolves the material claim construction disputes between the parties. The court will briefly address the technology at issue in this case, and then turn to the merits of the claim construction issues.

2. Background of the Technology

The patents are primarily directed to certain methods, systems and devices for high speed access to the Internet from remote locations, such as a person’s home. A device called a remote link adapter (“RLA”) provides a remote user with the ability to access digital information from a host computer at some location distant from the user. The patented technology enables the bi-directional transmission of data between a host computer and an end-user at a remote location.

¹ The ‘121 patent issued from U.S. Patent Application Serial No. 08/426,920 (“the ‘920 application). Both the ‘845 patent and the ‘727 patent each issued from children applications of the ‘920 application, and each of the three patents share a common written description. For clarity, the court will cite to the written description of the ‘121 patent when discussing any of the three patents.

The RLA can have two separate communication channels. One channel allows high speed digital information, such as packets, to be transmitted from the host, such as via a hybrid transmission facility over a standard 6 MHZ broadcast TV channel, to a user's computer. The second channel operates at a slower speed than the first channel, and allows information from the user's computer to be transmitted to the host computer. The channels can utilize the same or different media, and in one embodiment can include two separate cable television channels. The '774 patent is directed to the RLA portion of the communication system, and the '121 patent family is directed to the hybrid transmission facility portion of the communication system.

3. Discussion

A. General Principles Governing Claim Construction

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Id.* at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.* as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention. The patent is addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history

is intrinsic evidence. That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims.

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The en banc court condemned the suggestion made by *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Id.* at 1319-24. The approach suggested by *Tex. Digital* – the assignment of a limited role to the specification – was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of the claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors’ objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers

disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

B. The Prosecution History Does Not Justify the Limitations Sought by the Defendants.

The defendants base several of their claim construction arguments on statements made by the patentees with respect to certain activities referenced in the file history. The defendants argue that activities at IBM, Cupertino, and Comcast, are prior art and that the patentees' statements concerning those activities limits the scope of the claims. The alleged prior art activities were brought into the intrinsic record of certain of the patents at issue though either inventor declarations or third party protests.

It is important to note that although the file wrappers include these items, it does not appear that the Examiner or the patentees referred to any of the activities as prior art—at least in the traditional manner usually associated with patent prosecution. Nevertheless, the defendants argue that these activities serve as claim-limiting prior art to the ‘774 patent and that the patentees' statements concerning the activities limits the claims. In particular, the defendants suggest that the patentees distinguished the IBM art on the grounds that it did not perform a “routing” function like the patentees' invention. This position forms the basis for a number of the defendants' proposed constructions.

An examination of the activities in the file history and statements made by the patentees counsels the court to reject the defendants' limitations that are based on the prosecution history. In the first place, it is not clear how the IBM activities constitute prior art. The court can discern the following three potential bases for the defendants' assertion: 1) that IBM employees Powers

and Griefer knew of the patentees' invention before the critical date of September 10, 1991, 2) prior sale of the inventive concept by the patentees to IBM more than one year prior to the critical date, and/or 3) prior invention of the patented subject matter by Powers and Griefer.² Defendants' Brief at 5-6.

With respect to the first potential basis, assuming that Powers and Griefer knew of the patentees' invention before its critical date,³ such activity fails to constitute prior art because such knowledge was not public. The "known or used by others" language within 35 U.S.C. § 102(a) means "knowledge or use which is accessible to the public." *Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 139 (Fed. Cir. 1986) (citations omitted). Although the defendants apparently point to IBM's invention disclosure number SA890-00071 as evidencing the knowledge of the claimed invention by Powers and Griefer prior to the critical date, they fail to explain how such knowledge was public. Additionally, IBM's patent department was in receipt of the invention disclosure, making it likely that the disclosure was kept in confidence by IBM until June, 1992, the date of IBM's defensive publication. Because the defendants have failed to prove that the IBM activities were publicly known before the critical date, the IBM activities by Powers and Griefer do not constitute prior art. See *W. L. Gore & Assoc., Inc. v. Garlock, Inc.* 721 F.2d 1540, 1549 (Fed. Cir. 1983) (citation omitted).

With respect to the second potential basis, the defendants argue that the patentees offered their invention for sale when they responded to IBM's May 14, 1990 request for quotation to

² The IBM Technical Bulletin is a defensive publication as of June, 1992.

³ The court notes that the defendants failed to include the IBM invention disclosure number SA890-00071 and the referenced IBM defensive publication entitled "Hybrid Network Bridge," dated June, 1992, with their brief. As such, the court could not compare the content of either document with the patentee's invention.

manufacture a hybrid network bridge. Defendants' Brief at 6; *see also* Defendants' Brief, Exhibit J at PRE-00873-74,⁴ Exhibit S at PRE-00574. The defendants fail to address, however, patentee Moura's declaration which states that he did not conceive of the patentable features of the '774 patent until on or after September 10, 1990, a date that is almost four months after IBM's request for quotation. Defendants' Brief, Exhibit J at PRE-00874. Because the patentees' company was not selected by IBM to build its network bridge, it is unlikely that patentees offered to sell their invention to IBM on September 10, 1990, which, based on the evidence in the record, is the earliest conceivable date that the patentees' invention was ready for patenting. *See* Defendants' Brief, Exhibit S at PRE-00574. Therefore, the patentees' response to IBM's request for quotation does not serve as prior art. *Pfaff v. Wells Elecs. Inc.*, 525 U.S. 55, 67 (1998) (holding that an "invention must be ready for patenting" for the 102(b) on-sale bar to apply).

With respect to the third basis, the defendants apparently assert that IBM employees Powers and Griefer invented the subject matter of the '774 patent before the patentees. Defendants' Brief at 5-6. "However, prior conception of the invention by another does not [by itself] defeat one's right [because] [n]o possible barrier is created by s[ection] 102(g) unless another has actually reduced the invention to practice or has constructively reduced it to practice by filing a patent application." *In re Katz*, 687 F.2d 450, 454 (C.C.P.A. 1982). As is evidenced by the July 23, 1996, declaration by Powers, the concept documented in IBM disclosure number SA890-00071 was never reduced to practice. Defendants' Brief, Exhibit S at PRE-00574,

⁴ Several pages of the Defendants' Exhibit J, which is a declaration of a patentee, are conspicuously absent from their brief; however, Moura's complete declaration is apparently attached to the plaintiff's Opening Brief as Exhibit 12. On pages PRE-00858-859, patentee Moura stated that the invention claimed in the '304 application was not on sale prior to September 10, 1990. *Id.*

Exhibit U. Additionally, the defendants fail to allege that IBM actually filed a patent application on the referenced disclosure.⁵ As such, no reduction to practice occurred, and the alleged prior invention⁶ by Powers and Griefer was abandoned before any such original inventor status was perfected. Therefore, on this record, the alleged conception by Powers and Griefer does not serve as prior art to the ‘774 patent.⁷ *See In re Katz*, 687 F.2d at 454. Because it is not clear that the Examiner or the patentees even considered the IBM activities to be prior art, the court cannot conclude that the patentees’ statements concerning those activities limits the claims of the patents.

Similarly, the defendants argue that certain activities by the patentees, *i.e.* the Cupertino and Comcast activities, serve as prior art to the ‘121 patent family. The defendants fail, however, to explain how such activities constitute prior art. They additionally fail to include all relevant supporting information with their brief.⁸ Based on the record before it, the court can not conclude that the Cupertino or Comcast activities serve as prior art to the ‘121 patent family. As a result, the file history does not clearly reflect that the patentees distinguished their invention over the art of record to require the limitations advanced by the defendants. Bearing this holding in mind, the court now turns to the disputed terms of the patents.

⁵ This also seems unlikely due to IBM’s defensive publication of its inventive concept contained in disclosure number SA890-00071.

⁶ The defendants presented evidence suggesting that Powers and Griefer actually derived the conception contained in invention disclosure SA890-00071 from Moura’s work at Ferranti Datacom. *See Defendants’ Brief*, Exhibit U at PRE-01432.

⁷ The defendants do not point to any evidence that the Examiner of the ‘774 patent considered any of the IBM activities to be prior art. Further, the defendants included evidence with their brief that suggests the “IBM material” is “non-enabling.” *See Defendants’ Brief*, Exhibit N at PRE-00976. A disclosure must be enabling to serve as prior art. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354 (Fed. Cir. 2003).

⁸ For example, the defendants failed to include Exhibit A to the Moura Declaration of May 20, 1997, which they attached as Exhibit O to their brief. *See Defendants’ Brief*, Exhibit O.

C. Specific terms in dispute

1. Remote link adapters; RLA devices

The term “remote link adapters” appears in claim 12 of the ‘121 patent by virtue of its dependence from claim 11, and the term “RLA devices” appears in claim 52 of the ‘121 patent. The defendants ask the court to limit RLA devices to those that receive vestigial sideband (VSB) broadcasts and thereafter route the decoded data to data terminal equipment (“DTE”). The defendants improperly support their proposed construction with non-limiting passages from the ‘774 patent specification and prosecution history. The plaintiff asks the court to construe the term “RLA devices” to include the addressing and data detecting features that are characteristic of a modem. The court has considered the parties’ briefing and is not persuaded to adopt either proposed construction.

The defendants suggest that certain claim limitations in the ‘121 patent family are limited by the disclosure and prosecution history of the ‘774 reissue patent because the ‘774 patent is incorporated by reference within the specification of the ‘121 patent family. Upon review of the ‘121 patent specification, however, the court is unable to locate an explicit incorporation of the ‘774 patent by reference, or an incorporation of its underlying application (serial number 08/340,733).⁹ Therefore, the defendants are apparently basing their assertion solely on the incorporation by reference of the parent application to the ‘774 reissue patent, U.S. Patent No. 5,347,304 (“the ‘304 patent), within the specification of the ‘121 patent family. Although the court does not necessarily endorse the defendants’ argument as to the effect of such an

⁹ Additionally, the defendants’ brief fails to include a pinpoint citation to any supporting text.

incorporation by reference, for the reasons explained below, the court does not need to decide this issue.

The ‘304 patent is incorporated by reference into the ‘121 patent specification with the following language:

U.S. Pat. No. 5,347,304 (1994) assigned to Hybrid Networks, Inc.,
and describing an example of an RLA is hereby expressly referenced and incorporated herein in its entirety.

‘774 patent at 5:59-62 (emphasis added). Assuming that the above incorporation of the ‘304 patent effectively incorporated the ‘774 patent by reference, such incorporation fails to limit the claims of the ‘121 patent because the patentees expressly incorporated only “an example of an RLA” from the ‘304/’774 patent. ‘774 patent at 5:60-61. *Cook Biotech, Inc. v. Acell, Inc.*, 460 F.3d 1365 (Fed. Cir. 2006) is distinguishable for two reasons. First, the patentees in *Cook* expressly incorporated the entire disclosure of the limiting patent within the patent specification at issue. This is in contrast to the incorporation at hand, which serves to incorporate the ‘304 patent disclosure as only an illustrative example or embodiment. *Id.* at 1375-76. Second, the limiting language in *Cook* was found solely in the disclosure of the incorporated patent disclosure; not in both its disclosure and prosecution history. *Id.* Therefore, under the facts of this case, the court rejects the defendants’ argument that certain claim terms of the ‘121 patent family are limited by the incorporation of the ‘304 patent. The court will, however, examine the disclosure of the ‘304 patent for guidance on the construction of certain claim terms, as is appropriate.

The term “remote link adapter” or “RLA” was coined in the ‘304 patent specification. It is repeatedly used in the specification of the ‘121 patent family. As discussed above, the disclosure of the ‘304 patent specification was incorporated by reference within the specification of the ‘121 patent family to show an example of an RLA. *See* ‘121 patent at 5:59-62. Although the patentees incorporated the ‘304 patent as merely an example of an RLA, the ‘304 patent expressly describes several RLAs, and each description is consistent with the ‘121 patent specification. Thus, each description includes “a hybrid interface, a user interface, and a control means.” *See* ‘774 patent at 2:15-16. An illustrative implementation of an RLA is shown in Figure 3 of the ‘774 patent as follows:

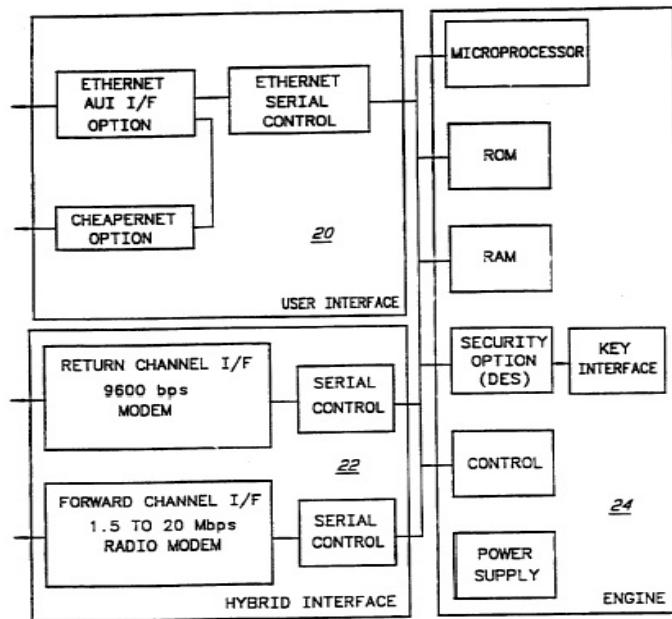


FIG. 3

As shown, the RLA includes a hybrid interface 22, a user interface 20, and a control means or engine 24. The hybrid interface is described as a high speed (approximately 10 Mbps) RF modem to receive broadcast channel signals. *See* ‘774 patent at 3:62-63. The engine 24

includes a microprocessor and memory to decode the incoming digital data. *See id.* at 3:65 - 4:3. The user interface 20 provides an output port for connection of data terminal equipment, such as a personal computer. *Id.* at 3:47-51, 60-62. The interface port is described as an Ethernet interface. *Id.* at 4:3-7.

The defendants propose definitions that require the RLA to decode data addressed to it “for routing to the DTE in contrast to using the media access layer” (*i.e.*, MAC address). The plaintiff counters that there is no basis to restrict the RLA to a “router.” The parties agree that a router is a device performing a communication function at Network Layer 3 Protocols (*e.g.*, Internet Protocol) rather than at a Link Layer 2 Protocol (Data Link Layer), which includes Media Access Control (MAC) rules. However, the plaintiff proposes a definition that includes both MAC addressing and IP addressing (*i.e.*, layer 3 protocols).

The written description of the ‘774 patent indicates that the protocol rules used by the RLA “described in accordance with this invention” serve to “filter” the packets of digital information being broadcast based upon a unique digitally encoded address. ‘774 patent at 4:44-50. This filtering is indicated as detecting packets with a particular address, which are then forwarded to the DTE for further processing. *Id.* at 4:60-65. There is no mention of “routing” of digital data packets among several DTE. The operation of the RLA is further described as establishing a link layer connection over the downstream broadcast channel. Moreover, the connection is characterized as one that “looks like a transparent remote Ethernet bridge and, therefore, is compatible with all upper layer protocols (*e.g.*, TCP/IP, AppleTalk, ISO, DECNET, etc.) that can run over Ethernet.” *Id.* at 5:42-45. Thus, according to the written description, it is not necessary that the RLA perform a routing function.

As discussed above, any statements regarding “routing” made by the patentees during prosecution do not limit the scope of the claims. Instead, the RLA may operate on the basis of only a MAC address to perform filtering. Therefore, the court construes the terms “remote link adapters” and “RLA devices” to mean “a device that has a unique address and includes a hybrid interface, a user interface, a microprocessor, and memory to detect data at a rate of 10 or more megabits per second.”

2. Remote site(s); remote locations

The term “remote site(s)” appears in claims 11 and 24 of the ‘774 patent, and the term “remote locations” appears in claim 24 of the ‘774 patent by virtue of its dependence from claim 20. The disagreement between the parties stems from each party’s inclusion of the term “remote link adapter” within their proposed construction. As such, the plaintiff again asks the court to require the terms in dispute to include a modem, and the defendants again request that the court limit the above terms to include a router. The court rejects those constructions and construes the terms to mean “end-user locations, such as homes, offices, or schools, that have end-user equipment and a remote link adapter.”

3. Multi mega bit per second

The term “multi mega bit per second” appears in claims 11, 24 (by its dependence from claim 20), 35, and 36 of the ‘774 patent. The parties dispute whether the term refers to the data rate addressed to a specific RLA, *e.g.* the transfer rate (the defendants’ position), or the aggregate data rate for the entire downstream channel. In dispositive form, the specification of the ‘774 patent states that high speed digital signals (containing information) can be broadcast from Data Communications Equipment (“DCE”) to a Hybrid Transmission Facility (“HTF”), such as through a piece of coaxial cable. The HTF can thereafter combine multiple incoming

high speed digital signals (from various DCEs) and broadcast that information through a downstream channel, such as a cable channel. An RLA at a user location will monitor (receive) the high speed signal and forward the appropriate information contained in that signal to the DTE. *See* ‘774 patent at 2:59-17; 4:57-50 (stating “the RLA modem automatically synchronizes to the incoming high-speed data being broadcast and starts monitoring (receiving) the incoming signal”). These passages indicate that the high speed rate is associated with the aggregate transmission rate.

Because the ‘774 patent specification fails to support the defendants’ restrictive construction, the court adopts the plaintiff’s proposed construction of the term “multi mega bit per second” as “an aggregate data transmission rate of 10 or more megabits per second.”

4. High speed

The term “high speed” appears in claims 12 (by its dependence from claim 11), 39, and 52 of the ‘121 patent, and in claim 119 of the ’845 patent. The parties agree that the term “high speed” shares a common construction with the term “multi mega bit per second.” Therefore, the court concludes that the term “high speed” means “an aggregate data transmission rate of 10 or more megabits per second.”

5. Remote user stations; remote clients

The term “remote user stations” appears in claims 35, 36, 37 (by virtue of its dependency), and 38 (by virtue of its dependency) of the ‘774 patent. The term “remote clients” appears in claims 12 (by virtue of its dependency), 39, and 52 of the ‘121 patent and in claim 119 of the ‘845 patent. The plaintiff asserts that the above terms should be construed as an RLA and a DTE. The defendants assert that the above terms should be construed as an RLA

With respect to the ‘774 patent, the term “remote user stations” appears only in the claims. A review of claim 25 shows that the term “remote user station” is used separately from the term “remote interface.” Additionally, the term “remote interface” is further defined to include an example of an RLA. Because the two terms are separately used, a “remote user station” does not necessarily include an RLA.

With respect to the ‘121 patent, the term “remote client” appears only in the claims and figures. Claims 8 and 9 each use the terms “remote clients” and “remote link adapters.” Therefore, the term “remote clients” is not necessarily inclusive of a “remote link adapter.” The same rationale holds true for claim 9 of the ‘845 patent.

Because neither a “remote user station” nor a “remote client” necessarily includes an RLA, the court construes those terms to mean “data terminal equipment located at an end-user location.”

6. Data terminal equipment; remote devices

The term “data terminal equipment” appears in claims 11 and 24 of the ‘774 patent. The term “remote devices” appears in claims 16 and 26 of the ‘727 patent. The plaintiff asks the court to construe the terms to mean “equipment that processes upper layer protocols including network and transport layer protocols” or, in the alternative, “computer.” The defendants ask the court to construe the terms to mean “end-user equipment that receives high speed data addressed to a remote link adapter for routing to data terminal equipment in contrast to using the media access layer.” The written description of each patent fails to shed much light on the meaning of each of the terms at hand, as the terms appear primarily within the claims. The court construes each of the above terms to mean “end-user computer equipment.”

7. Address information

The term “address information” appears in claims 11, 24, 35, and 36 of the ‘774 patent. The plaintiff’s proposed construction is “any type of address info (not limited to a particular protocol or to a particular layer).” The defendants’ proposed construction is “numbers or bits used to identify a remote link adapter as the destination for data sent to it for routing to data terminal equipment in contrast to using the media access layer.” According to the specification, each piece of electronic equipment has at least one “unique digitally encoded address.” *See* ‘774 patent at 4:49-50, cl. 10. Such address can, for example, be used to identify a subscriber (at a particular destination) and a source, such as a host computer. *See* ‘774 patent at 6:31-33. Each party’s proposed construction improperly incorporates limitations regarding protocol layers. Therefore, the court rejects the parties’ constructions and construes “address information” to mean “characters, numbers or bits used to represent an address.”

8. Two way interactive communication

The term “two way interactive communication” appears in the preamble of claims 35, 36, 37 (by virtue of its dependency on claim 35), and 38 (by virtue of its dependency on claim 36) of the ‘774 patent. The plaintiff’s proposed construction is “a non-simultaneous exchange of information or commands (handshake) between a host computer and a remote user station.” The defendants propose “connection which assigns an upstream channel to a single remote link adapter.” The court has considered the arguments of the parties and construes the term “two way interactive communication” to mean “a bi-directional exchange of information or commands between a host computer and a remote computer.”

9. Host computer; host server; server; host

The above terms are found in various claims of all of the patents in suit. The defendants' proposed construction of each of the above terms is "a source of data for presentation to data terminal equipment." The plaintiff's proposed construction is "computer that sends data downstream." Upon consideration of the parties' arguments, the court adopts the plaintiff's proposed construction.

10. Independent forward and return channels; upstream channel that is independent of the downstream channel; independent upstream channel

The above terms are found in various claims of the '774, '121, and '845 patents. The plaintiff's proposed construction of each term is "the downstream channel is different from the upstream channel, either in the same or a different medium." The defendants propose "forward (downstream) and return (upstream) channels which are not contingent upon one another that connect to an interface allowing for multiple types of physical media to be used on the return (upstream) channel." The court has considered the parties' arguments and adopts the plaintiff's proposed construction. The specification and prosecution history do not require the channels to use different media.

11. Forward channel protocol; high speed downstream channel protocol

The term "forward channel protocol" is found in claims 35, 36, 37 (by virtue of its dependence on claim 35), and 38 (by virtue of its dependence on claim 36) of the '774 patent. The term "high speed downstream channel protocol" is found in claims 39 and 52 of the '121 patent and claim 119 of the '845 patent. The plaintiff's proposed construction of each of the above terms is "any set of rules for downstream transmission of high speed data which includes

standard upper layer protocols.” The defendants’ counter-construction is “set of rules for transmission of high speed data addressed to a remote link adapter for routing to data terminal equipment in contrast to using the media access layer.” The court has considered the parties’ arguments and defines the phrase to mean “a set of rules for transmission of high speed data addressed to a remote link adapter.”

12. Lower speed return channel protocol; upstream channel protocol

The term “lower speed return channel protocol” is found in claims 35, 36, 37 (by virtue of its dependence on claim 35), and 38 (by virtue of its dependence on claim 36) of the ‘774 patent. The term “upstream channel protocol” is found in claims 39 and 52 of the ‘121 patent and claim 119 of the ‘845 patent. The plaintiff proposes a construction of “any set of rules for data transmission upstream” and the defendants propose a construction of “set of rules for assigning an upstream channel to a single remote link adapter.” Upon consideration of the arguments, the court construes each of the above terms to mean “a set of rules for transmission of lower speed data addressed to a host computer or server.”

13. Interactive network sessions; interactive asymmetric communication in a session; interactive session; interactive communication

The above terms are present in certain claims of the ‘121 and ‘845 patents. The plaintiff proposes “any established communication connection between a host computer and a remote location” as a construction, while the defendants propose “connection which assigns an upstream channel to a single remote link adapter.” The court has reviewed and considered the parties’ arguments and construes each of the above terms to mean “an established communication connection where information or commands are exchanged between a host server and a remote client in real time.”

14. Scheduling information

This term is present in claim 39 of the ‘121 patent. The court adopts the parties’ agreed construction of “a signal specifying the time interval in which a remote link adapter can make a request for an upstream channel.”

15. Transparent

This term is present within claims 16 and 26 of the ‘727 patent. The plaintiff argues for a construction of “the support of upper layer protocols so that a remote device and a host server may communicate directly according to their respective upper layer protocols.” The defendants propose “to perform in a manner that is invisible to, and of no concern to a user.” Based on the pertinent portions of the specification, the defendants’ construction is proper, and the court adopts it.

16. Network management system; a control system common to the downstream and upstream channels

The term “network management system” appears in claim 119 of the ‘845 patent, and the term “a control system common to the downstream and upstream channels” appears in claim 16 of the ‘727 patent. The plaintiff proposes “a device that provides active management of both upstream and downstream channels” as a construction for each of the above terms. The defendants counter with “a common network management system that is separate and apart from upstream and downstream routers for controlling paths in both the upstream and downstream channels of hybrid interfaces” as a construction. The relevant portions of the specification and the drawings in the patent counsel the court to conclude that the network management system is a control system that is separate and apart from the upstream and downstream routers. As a

result, upon consideration of the parties' arguments, the court adopts the defendants' construction.

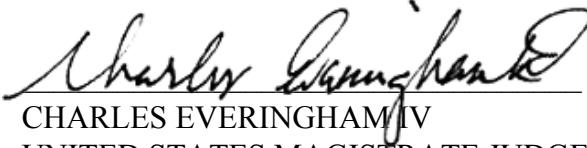
17. Hybrid access system

The term "hybrid access system" appears in claims 12 (by virtue of its dependency), 39, and 52 of the '121 patent. The plaintiff proposes a construction of "a device that provides active management of both upstream and downstream channels." The defendants propose "a common network management system that is separate and apart from upstream and downstream routers for controlling paths in both the upstream and downstream channels of hybrid interfaces." In accordance with the specification, the court defines a "hybrid access system" as "a system for managing upstream and downstream communications between a host computer and one or more remote clients."

4. Conclusion

The court adopts the above definitions for those terms in need of construction. The court recognizes that it has not construed all of the terms proposed in the parties' briefing. Nevertheless, the court has attempted to construe all of the terms that the parties addressed in oral argument as the material terms in dispute. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the court.

SIGNED this 4th day of May, 2007.


Charles Everingham IV
CHARLES EVERINGHAM IV
UNITED STATES MAGISTRATE JUDGE